REMARKS

The Office Action dated February 23, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 18 and 29 have been amended, however, no new matter has been introduced. Claims 18-34 are pending and are submitted for consideration.

Claims 18, 21-29, and 32-34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Linkola* (US Patent No. 6,708,033) in view of *Foster* (US Patent No. 5,918,181). The Office Action took the position that *Linkola* teaches each and every element recited in claims 18, 21-29, and 32-34, except for wherein responsive to the user equipment not currently being connected in the network, the location of the user equipment is determined in dependence on the stored connection information for the user equipment, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment. However, the Office Action cites to *Foster* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claims 18, 21-29, and 32-34.

Independent claim 18, upon which claims 19, 21, and 26-28 depend, recites a method in a communication system for providing a location service with geographical location information associated with a user equipment capable of communicating with the communication system, the method comprising the steps of storing connection information identifying a connection of the user equipment in the communication system, and determining whether the user equipment is currently reachable in the network, wherein responsive to the user equipment not currently being reachable in the network, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment and wherein the connection information includes a service area identity or a cell global identity, the method further including the step of translating the connection information into geographical coordinates.

Independent claim 29, upon which claims 30, and 32-34 depend, recites a communication system comprising a location server for providing geographical location information associated with a user equipment capable of communicating with the communication system, and a network element for storing connection information identifying a connection of the user equipment in the communication system and for determining whether the user equipment is currently reachable in the network, wherein responsive to a request from the location server for location information when the user equipment is not currently reachable in the network, the network element provides the location server with details of the connection information last stored for the user equipment, the connection information including a service area identity or a cell global

identity, and wherein the location server translates the connection information into geographical coordinates.

Applicants submit that each of independent claims 18 and 29 recite subject matter that is not taught, shown, or otherwise suggested by the cited combination of references.

Linkola teaches a system for changing the service profile of a mobile subscriber including a location part, a evaluation part, and a subscriber connection exchange part. A home location register contains individual subscriber connections, which have a different service profiles. The location part finds out the location of the mobile station in the network and to give location information to the evaluation part, which checks if the location information has changed compared with the location information received earlier. If the information has changed, it searches the memory for the corresponding location information and compares the connection information in the record with the current connection information. If the connection information is identical, the process remains waiting for new location information. If the connection information is different, the evaluation logic deduces that the connection must be exchanged for a new one and a connection exchange operation must be started.

However, as acknowledged by the Office Action, *Linkola* does not teach, show, or suggest that responsive to the user equipment not currently being connected in the network, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment. *Linkola* similarly makes no

mention of acting responsive to the user equipment not currently being reachable in the network.

Foster teaches method and apparatus for operating and locating a digital cordless telephone (DCT) handset among an integrated network of base stations. The system utilizes a standard communication protocol to establish radio communication links between terminals and a network of base stations, where each base station is directly interfaced to a local exchange and is capable of providing access to the public and/or private telephone network. Each base station is a network node that contains a copy of a common database that may be updated, as needed, to provide current information on the location of individual terminals. The common database contains various information on each base station, each terminal, and the latest location of each terminal at a particular base station. In sum, *Foster* discloses a system in which a mobile handset is located by the system when an incoming call for the handset is received. Therefore, the handset is only located once a connection needs to be set up. The system in *Foster* first tries to locate the handset from the base station at which the call is received and at the last known base station of the handset. If this is not successful, the system tries to locate the handset from all base stations in the network. If this does not succeed in locating the handset, then the call to the handset cannot be set up.

However, there is no teaching, showing, or suggestion in *Foster* of locating the handset if it is not reachable, as the handset is only located if an incoming call is made, and there is no teaching, showing, or suggestion in *Foster* to locate the handset if it is not

reachable. More particularly, neither *Linkola* nor *Foster*, when taken alone or in combination, teach, show, or suggest "storing connection information identifying a connection of the user equipment in the communication system; and determining whether the user equipment is currently reachable in the network, wherein responsive to the user equipment not currently being reachable in the network, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment," as recited in Applicants independent claim 18. Further, neither *Linkola* nor *Foster*, when taken alone or in combination, teach, show, or suggest "a network element for storing connection information identifying a connection of the user equipment in the communication system and for determining whether the user equipment is currently reachable in the network, wherein responsive to a request from the location server for location information when the user equipment is not currently reachable in the network, the network element provides the location server with details of the connection information last stored for the user equipment," as recited in Applicants' independent claim 29.

Contrary to Applicants' claimed invention, *Foster* discloses a system in which the only way of locating the handset is to poll it from various base stations, until it is located and a "found" message is sent (column 8, line 36-38 of *Foster*). Therefore, if the handset were not reachable, then the system of locating the handset by polling would not work, as the handset would not respond to the polls and hence could not be located. Therefore, the Applicants submit that *Foster* does not disclose responsive to the user equipment not

currently being reachable in the network, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment, as recited in Applicants' independent claims 18 and 29. Furthermore, the Applicants also submit that there would be no motivation for one of ordinary skill in the art combine *Foster* with *Linkola*, as the system in *Foster* is clearly only directed to the case where the user needs to be located to set up a call, and cannot be used to locate a user in a scenario where the user equipment is not reachable, as with the present invention.

Further still, claim 18 recites "the method further including the step of translating the connection information into geographical coordinates". The Office Action has taken the position that this feature is not disclosed by *Foster*, but that the feature is disclosed in *Linkola*, to which Applicants respectfully disagree. The abstract of *Linkola* discloses that the location information may be "a location area identity, cell identity or switching centre identity." However, there is no mention in *Linkola* of translating the connection information into geographical coordinates, as recited in independent claims 18 and 29. Further, a person of ordinary skill in the art would clearly understand that geographical coordinates are not the same as a location area identity, cell identity, or switching centre identity taught by *Linkola*. Rather, it is the location area identity, cell identity, or switching centre identity that needs to undergo the step of translation in order to obtain the geographical coordinates. There is no mention of such a step in *Linkola*, and *Foster* only attempts to locate the base station with which the handset can communicate, and makes no mention of a translation of this information to geographical coordinates.

Therefore, Applicants submit that this feature is neither taught, shown, nor suggested in either Linkola or Foster, when taken alone or in combination.

Therefore, Applicants submit that independent claims 18 and 29 recite subject matter that is not taught, shown, or otherwise suggested by the combination of *Linkola* and *Foster*. As such, reconsideration and withdrawal of the rejection of independent claims 18 and 29, along with dependent claims 19-28 and 30-34, is respectfully requested.

Claims 19, 20, 30, and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Linkola* and *Foster*, further in view of *Amirijoo* (US Patent No. 6,603,976). The Office Action took the position that *Linkola* and *Foster* teach each and every element recited in claims 19, 20, 30, and 31, except for the location service being provided by a gateway mobile location center. However, the Office Action cites to *Amirijoo* as teaching this feature, and as such, the Office Action concluded that it would have been obvious to one of ordinary skill in the art to have combined the teaching of the references to generate Applicants' claimed invention. Applicants traverse the rejection and respectfully submit that the cited combination of references, when taken alone or in combination, fails to teach, show, or suggest each and every limitation recited in claims 19, 20, 30, and 31.

Linkola and *Foster* are discussed above. *Amirijoo* teaches a wireless communications system capable of delivering Time Of Arrival (TOA) positioning data to at least one externally operated and maintained requesting agent, including a gateway to

the external agent, which provides an interface to the requesting agent. However, *Amirijoo* does not teach, show, or suggest translating the connection information into geographical coordinates; storing connection information identifying a connection of the user equipment in the communication system, and determining whether the user equipment is currently reachable in the network, wherein responsive to the user equipment not currently being reachable in the network, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment; or a network element for storing connection information identifying a connection of the user equipment in the communication system and for determining whether the user equipment is currently reachable in the network, wherein responsive to a request from the location server for location information when the user equipment is not currently reachable in the network, the network element provides the location server with details of the connection information last stored for the user equipment, as recited in Applicants independent claims 18 and 29.

As such, Applicants submit that *Amirijoo* fails to further the teaching of *Linkola* and *Foster* to the level necessary to support an obviousness rejection. Therefore, reconsideration and withdrawal of the rejection of claims 19, 20, 30, and 31 is respectfully requested.

In conclusion, Applicants submit that independent claims 18 and 29 recite subject matter that is not taught, shown, or otherwise suggested by the cited combination of references. Therefore, Applicants submit that claims 18 and 29, along with dependent
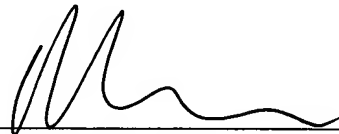
claims 19-28 and 30-34, are allowable over the cited art. Reconsideration and withdrawal of the rejections of these claims is respectfully requested. Claims 18-34 are pending and are submitted for consideration.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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